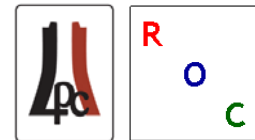




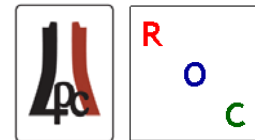
Data



- **Data Cataloguing** (Michiel Sanders, Lee Lueking, Yujun Wu)
 - Proceed with plan to catalogue MTCC data locally.
 - Get run numbers from files, and generate DBS.
 - Get experience and exercise DBS at FNAL. With usefulness, we might be able to get further interest.
 - As long as all MTCC data is transferred to FNAL, this will work.
 - Proposal is summarized here:
<https://uimon.cern.ch/twiki/bin/view/CMS/DMS-DBS-Detector-data-proposal>
 - Effort on hold while Michiel is away from late June through early August for work, conferences and vacation.
- **Data Transfer** (Yujun Wu, Carsten Noeding, Patrick Gartung)
 - HCAL local DAQ data transfer (cosmics, LED) is continuing without any problems. Working on Tracker local DAQ data transfer.
 - The general page for PhEDEx is at:
<http://cms-project-phedex.web.cern.ch/cms-project-phedex/>
There will be an item for MTCC when it is running.
 - FNAL is almost ready to accept MTCC data. HCAL/ECAL test-beam data will be produced starting some time in July and will be transferred to Fermilab.



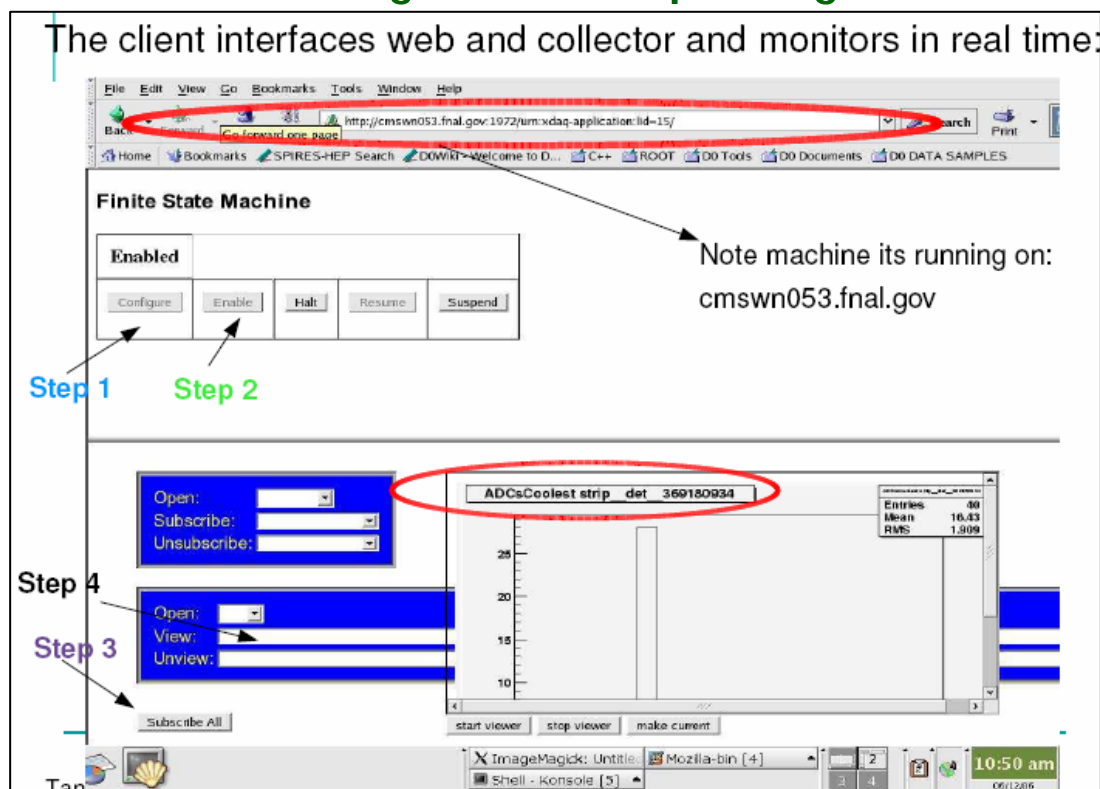
HCAL DQM



- **Development** (Wade Fisher, Christos Leonidopoulos)
 - Stable for MTCC, with about 1000 channels to be read out.
 - Based on CMSSW_0_6_0. Defaults to global and error histograms.
 - Action items:
 - Add reference/glossary to histograms and HCAL properties.
 - Need more users for experience and feedback.
- **Users** (Lisa Berntzon, Pawel de Barbaro)
 - Set up the DQM HCAL software at SX5 (local DAQ).
 - The monitor.cfg needs to be edited for type of data - Cosmics, Test Beam, LED, Pedestals - and also for geometry map, etc. The run type specifics are a current obstacle to automation...
 - Example - the resulting histograms from local HCAL Run 255:
<http://www.physto.se/~lisab/000000255/>
 - Activities at SX5 to attempt to take global DAQ data with CSC and HCAL.
 - Asked about running HCAL DQM in HLT, however, there are some other higher priority issues.

Tania Moulik, Carsten Noeding, Andriy Zatserklyaniy, Pushpa Bhat

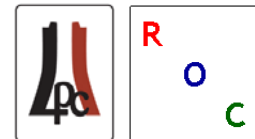
- Recently started with existing CMSSW DQM framework
 - Previously used root macros along with C++ package written for TEC
- Running the SiStripTrack Monitoring chain on cmsuaf



- Tested native DQM on ROC machines successfully. However, tracking DQM still needs debugging (0_7_0_pre6).



Storage Manager

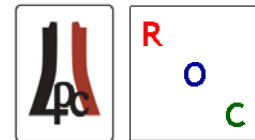


Kurt Biery, Harry Cheung

- The SM receives events from the high level trigger farm, writes them to disk, and serves a small fraction of them to monitoring processes (aka consumers)
- Progress is being made on two fronts:
 - 1) Testing the existing (proof-of-concept) version with various consumers
 - Successfully tested a demo system at Fermilab with the event display and an HCAL monitor. In the demo, events were read from a file into the EventFilter (HLT), transferred to the storage manager, and sent to the consumer. A couple of minor issues have been found and fixed.
 - Ianna Osborne is trying to run the event display at point 5 using the global DAQ storage manager as input. The current problems seem to be configuration issues. Harry Cheung is working with Ianna to get these sorted out.
 - 2) Adding functionality to get to the final version of the SM
 - For the "event server" part of the SM, the plan is to proceed in stages:
 - Improving the message formats, adding support for multiple consumers, allowing consumers to request specific types of events, and adding support for asynchronous transfer of events.
 - There are also changes to be made in the "logger" part of the SM and its interface to the HLT that will be going on in parallel.
 - Currently working out the details of the message improvements, so the work is just getting started.



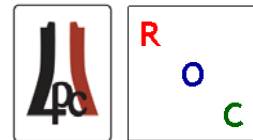
Web Based Monitoring



- New name "Web Based Monitoring" for web page:
<http://cmsdaquser0.cern.ch:8000/> (Steve Murray, Bill Badgett, Zongru Wan)
- CMS Page 1 and the Database browsing work of the ROC are now consolidated.
 - Created a cmscvcs module: TriDAS/wbm.
- See recent presentations for more details:
<http://indico.cern.ch/materialDisplay.py?materialId=slides&confId=4096>
<http://indico.cern.ch/conferenceDisplay.py?confId=3827>
- Developing Expert Tier tools (not for Shift Crew)
 - General database browser
 - For people who know a little SQL and would like to create new web pages - need to know where data are
 - Basic low level servlets
 - Tools for creating new pages, use Java inheritance to make it easy
 - DatabaseBrowser, SlowControlBrowser, RootBrowser
 - Beta versions already in place
- Non-expert tools (for Shift Crew)
 - No need to know SQL nor details of database structure
 - Depends on implementations - most of which do not yet exist!
 - Difficult to design without details
 - Zongru's HCAL examples - Still no PVSS/DCS yet




WBM



Web Based Monitoring - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://cmsdaquser0.cern.ch:8000/> Go



Web Based Monitoring

LHC	CMS	code
Customized Slides	CMS Page 1	Quick Guide
Beam Status	Customized Slides (HCAL)	Documentation
Luminosity	Trigger Rate	Java
	DAQ Status	Root
	HCAL SlowControl	SQL
	Data Quality	
	Shifts	
	Fills	
	DatabaseBrowser*	
	SlowControlBrowser*	
	RunSummary	

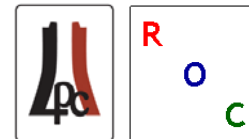
** not recommended for Internet Explorer*

CMS WBM Status Presentation, 2007.06.27: [ppt](#) | [pdf](#)

Steven Murray, William Badgett & Zongru Wan; last modified on 2006.06.05



CMS Page 1



CMS Page 1 - Microsoft Internet Explorer

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Address <http://cms-page1-jas.web.cern.ch/cms-page1-jas/> Go

CMS Page 1

Run Information

Run number	1572
Username	mtcc
Booking time	2006/07/06 12:14:41
Run-control state	Stopped
Start time	2006/07/06 12:15:05
Start time	2006/07/06 12:29:03
Level 1 trigger rate	N/A

DCS

DAQ cluster temperature	24.4 C
DAQ cluster dew point	14.1 C
DAQ cluster relative humidity	50.1 %

Sub-Detector RC

Name	In/Out	State
CSC	N/A	N/A
DT	N/A	N/A
ECAL	N/A	N/A
HCAL	N/A	N/A
RPC	N/A	N/A
Tracker	N/A	N/A
Trigger	N/A	N/A

RU Builder

Event rate	Not running
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Magnet

Max temperature	7.6 K
Min temperature	6.9 K

Note: All times are given in UTC

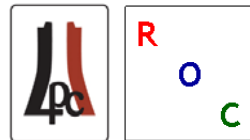
This page is part of the **CMS Web Based Monitoring Project**

Steven Murray , William Badgett & Zongru Wan

Internet



RunSummary



CMS RunSummary - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://cmsdaquser0.cern.ch:8000/cmsdb/servlet/RunSummary> Go

CMS RunSummary Information

RunSummary for Specific Runs

Enter a RunNumber or LHC Fill and press **return**; [All LHC Fills](#) | [Range of LHC Fills](#) | [SlowControl by Date](#) | [DownTimeCategories](#)

CMS RunNumber: **LHC Fill:**

or Search over a range of runs

Enter range of RunNumbers or range of dates and press or click here ☐ for the last 24 hours

Begin RunNumber:	<input type="text"/>	End RunNumber:	<input type="text"/>
Begin date YYYY.MM.DD:	<input type="text"/>	End date YYYY.MM.DD:	<input type="text"/>
Minimum Events:	<input type="text"/>	Minimum Lumi (pb⁻¹):	<input type="text"/>
ComponentName:	<input type="text"/>	DataType (integer):	<input type="text"/>
TriggerTable:	<input type="text"/>	RunType:	<input type="text"/>

TriggerTable search format should look like this: PHYSICS_1_03_v2 (for example) or like this: PHYSICS_1_0% (with wildcard)
Use percent sign '%' for wildcarding; searches are not case sensitive; ☐ Require Silicon

Select GoodRun Criteria: (Checked box indicates a positive result required; non-checked box imposes no requirement)

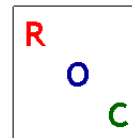
Global Good Run	Online Status	Offline Status
<input type="checkbox"/> GoodRun (core components)	<input type="checkbox"/> GoodRun: RunControl (automatic)	<input type="checkbox"/> GoodRun: Offline (Production and Validation)
<input type="checkbox"/> Run Checked	<input type="checkbox"/> AnalysisRun: send to Production farms (ShiftCrew, end of run)	<input type="checkbox"/> GoodRun: Physics (Analysis groups)

Components Online Status:

<input type="checkbox"/> FLT	<input type="checkbox"/> HLT	<input type="checkbox"/> TRK	<input type="checkbox"/> ECAL	<input type="checkbox"/> HCAL	<input type="checkbox"/> DT	<input type="checkbox"/> RPC	<input type="checkbox"/> CSC
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ROC




CMS FNAL Remote Operations Center - Microsoft Internet Explorer

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Address http://www.uscms.org/LPC/lpc_roc/ Go



CMS FNAL Remote Operations Center



Located in the northwest corner on the 11th floor of FNAL Wilson Hall, the ROC currently provides remote access to the CMS data from test beams and calibrations. In the near future, physicists working from the ROC will participate in real-time data monitoring of the Magnet Test and Cosmic Challenge. For the LHC physics run beginning in 2007, physicists will be able to perform shift duties from the ROC, including the monitoring of detector subsystems, trigger rates, and data quality.

ROC	WBM	ELog	Mailing List	Meetings	LHC@FNAL
	CMS Workbook	Directories / Glossaries	New User Instructions	Photos	Quick Guide
	Accounts & Nodes	Data Sets	Floor Plan	VRVS / ESnet	Google / Wikipedia
	EMU DQM	HCAL DQM	Pixel DQM	IGUANA Web Server	
LPC	CERN CVS	Computing	Cosmic Test	dCache	Linux PC Inventory
	LPC at Work	Maintenance & Operation	Meetings / Rooms	News	Remote Analysis Builder
	Resources Grid	Software Environment	Software Releases		
CMS	Page 1	Agendas / Map / Daily			
	CMSSW	CVS / LXR	Data Management	DQM	Event Filter
	Framework & EDM	HyperNews	IGUANA	Online Selection	Savannah
	Software	Storage Manager	Timing & Control	Trigger & DAQ	TWiki
	Controls / Safety	ECAL	Electronics	Tracker	
MTCC	ELog	Goals / Schedule	Live Event Display	Run Meetings	Web Cams 1 / 2 / 3 / 4 / 5 / 6 / SX5
	Computing	Online Workbook	Run Control	Transfer Tests / Results	Trigger
LHC	Accelerators & Beams	Dashboard	Experiments	Schedule	
CERN	Bulletin / Courier	Document Server	Information Technology	Users' Office	
Fermilab	All Exp Mtg	Beam Status	Computing	List Server	Seminars
	Today	Training	Users' Office	Weather	VMS